

## CLAIMS

- 1 – Vertebral osteosynthesis equipment, including bony anchoring members, such as pedicular screws (1) and/or lamar hooks, one or two linking rods (2), intended to be connected to these anchoring members and to be  
5 attached to the vertebrae by dint thereof, parts (3) for connecting this(these) linking rod(s) (2) to these anchoring members, and clamping means, such as nuts (4), for locking the linking rod(s) (2) in said connecting parts (3) ; at least one anchoring member is of the "polyaxial" type, i.e. comprises one proximal stud (5) articulated with respect to a body (6) intended for gripping a vertebra ;  
10 equipment characterized in that :  
- the proximal stud (5) of said polyaxial anchoring member exhibits an articulation head (11) in the form of a spherical cap ; and  
- said body (6) of this anchoring member comprises a cavity (16) intended for accommodating this articulation head (11) and a wall (17)  
15 surrounding this cavity (16), this wall (17) being crimped around said articulation head (11) and shaped in order to provide a proximal form, at least partially hemispherical.
- 2 – Vertebral osteosynthesis equipment according to claim 1, characterized in that said body (6) comprises a proximal gripping portion  
20 enabling to hold said body (6) when tightening said clamping means, this proximal gripping portion being formed of a collar (18) exhibiting several radial notches (19).
- 3 – Vertebral osteosynthesis equipment according to claim 2, characterized in that said collar (18) exhibits four notches (19) at 90° to one  
25 another.
- 4 – Vertebral osteosynthesis equipment according to anyone of claims 1 to 3, characterized in that comprises at least one connecting part (3) exhibiting a rounded section (20) intended for surrounding a linking rod (2) and two parallel drilled wings (21), these wings (21) being intended for engaging onto  
30 said proximal stud (5) and for being clamped, using said clamping means (4), against a bearing surface (17) contained in said polyaxial anchoring member ; the distal wing (21) of this connecting part (3) exhibits a distal cavity (28) in the form of a spherical cap, of greater diameter than that of said crimped wall (17),

the connecting part (3) being intended for resting against this crimped wall (17) at of this cavity (28).

5        5 – Vertebral osteosynthesis equipment according to claim 4, characterized in that said clamping means is a nut (4) and the proximal branch (21) of this connecting part (3) comprises a proximal cavity (25) wherein a corresponding zone exhibited by this nut (4) is intended for engaging.

6 – Vertebral osteosynthesis equipment according to claim 5, characterized in that said cavity (25) and said corresponding zone of the nut (4) are conical in shape.

10       7 – Vertebral osteosynthesis equipment according to anyone of claims 1 to 6, characterized in that the stud (5) exhibits a zone (15) of reduced diameter, enabling to break its proximal portion after placing and clamping the nut (4).

15       8 – Vertebral osteosynthesis equipment according to anyone of claims 1 to 6, characterized in that the proximal stud (5) and said connecting part (3) comprise means (14, 29) enabling to immobilise the proximal stud (5) in rotation when the connecting part (3) is engaged on this proximal stud (5)

20       9 – Vertebral osteosynthesis equipment according to claim 8, characterized in that said means comprise at least one flat surface (14) provided on the proximal stud (5) and at least one flat surface provided on the connecting part (3), whereas these flats surfaces are immediately close to one another when the connecting part (3) is engaged on the proximal stud (5).

25       10 – Method for manufacturing the polyaxial anchoring member according to anyone of claims 1 to 9, characterized in that it comprises the steps consisting in :

- providing, on the part intended for the proximal stud (5) of said polyaxial anchoring member, an articulation head (11) in the form of a spherical cap ;
- providing a cavity (16) in the proximal zone of the part intended for said body (6) of said anchoring member polyaxial, and, around this cavity (16), a
- 30       wall (17) which may be crimped ;
- engaging said articulation head (11) into said cavity (16), and
- crimping said wall (17) around said articulation head (11) so that this wall (17) exhibits a proximal form at least partially hemispherical.